

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND
(Baltimore Division)

TODD HECKMAN

Plaintiff,

v.

RYDER TRUCK RENTAL, INC., *et al.*

Defendants.

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Case No.: 1:12cv664 (CCB)

**DEFENDANT MICKEY TRUCK BODIES, INC.'S MOTION TO
EXCLUDE OPINION TESTIMONY OF PLAINTIFF'S EXPERTS,
DENNIS L. MCGARRY, THOMAS W. BUTLER, AND STANLEY D. PULZ**

EXHIBIT 15



STANLEY PULZ, ASSOCIATES, INC.

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Todd Heckman v.

Ryder Truck Rental, et al.

For:

**Justin F. Zuber, Esq.
Shulman, Rogers, Gandal, Pordy, and Ecker
12505 Potomac Avenue, 6th Floor
Potomac, MD 20854**

SPA, inc. PROJECT NO. 3121201

ISSUE DATE: October 8, 2012

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Attachment #1:	Curriculum Vitae for Stanley D. Pulz
Attachment #2:	Testimony List for Stanley D. Pulz, CSP, P.E.
Attachment #3:	SPA, inc. Rate and Billing Schedule

I. PROJECT SUMMARY

PROJECT ASSIGNMENT

SPA, inc. was requested by Shulman, Rogers, Gandal, Pordy, and Ecker, 12505 Potomac Avenue, 6th Floor, Potomac, MD 20854, to investigate an accident that occurred on March 6, 2009. It was reported to SPA, inc. that Mr. Todd Heckman, an employee of Wantz Distributors, Inc., was injured when he was pulling on a synthetic strap attached to a rolling door on the side of a delivery truck causing him to fall into the roadway where he was struck by a Ford utility vehicle. The accident occurred near the Sandy Hook Grocery Store at 18952 Sandy Hook Road in Knoxville, Maryland.

SPA, inc. was requested to review file materials, conduct appropriate research, and perform a safety and human factors engineering analysis regarding the above referenced accident. The investigator of this accident for SPA, inc. is Stanley D. Pulz, M.A., CSP, P.E. Mr. Pulz is a Certified Safety Professional, Registered Professional Engineer (safety), and Master's Level Psychologist specializing in technical aspects of applied human factors engineering and safety.

Mr. Pulz has over 35 years' experience as a safety and human factors engineer and serves as a member of numerous national consensus safety standard committees. A copy of Mr. Pulz's curriculum vitae is included in the Attachment 1 of this report. Mr. Pulz's testimony list is located in Attachment #2 and his Rate and Billing Schedule is located in Attachment #3.

SCOPE OF THE PROJECT

SPA, inc. has reviewed file materials, conducted appropriate research, and investigated the accident that occurred on March 6, 2009.

CONCLUSIONS

- The unexpected failure of a faulty synthetic strap attached to the inside of a rolling truck door was the direct cause of Mr. Heckman's accident event.
- The location of the attachment of the synthetic strap inside of a rolling truck door is not readily visible to the user pulling on the strap while on the outside of the truck.
- The unexpected failure of a faulty synthetic strap attached to the inside of a rolling truck door creates a hazard to the user, such as Mr. Heckman.
- There was a safety notice sign located on the truck but not on the subject door stating: "ATTENTION Door Rollers and Door Straps Must Be Checked on a Regular Basis. Damaged or Frayed Straps Must Be Replaced. Nationally recognized consensus standards such as American National Standards Institute

(ANSI) Z535.4 American National Standard -- Product Safety Signs and Labels, states that Safety Notice Signs should only give notice of safety practices not directly related to physical injury. The sign located on the subject truck is not a warning sign, it does not comply with nationally recognized standards for warning sign design, and it was not located in close proximity to the hazard that Mr. Heckman was exposed to by the truck manufacturer, Mickey Truck Bodies, Inc. Therefore, it is not conspicuous and would not readily be recognized by users such as Mr. Heckman.

- The lack of adequate warning signs related to the hazard associated with synthetic strap failure while physically pulling on the strap was a contributing cause of Mr. Heckman's accident event.

II. PROCEDURES

The following list of documents was provided to and reviewed by SPA, inc.:

- Deposition Transcript of Jeremy E. McAfee taken on July 27, 2012
- Deposition Transcript of Todd A. Heckman taken on July 27, 2012
- Deposition Transcript of Benjamin D. Strong taken on September 10, 2012
- Deposition Transcript of H. Dean Sink taken on August 30, 2012 (With Exhibits)
- Deposition Transcript of Jason Sweeney taken on August 31, 2012
- Deposition Transcript of Stephen Faith taken on August 31, 2012
- Deposition Transcript of Randy W. Spigler taken on September 10, 2012
- Complaint
- Plaintiff Todd Heckman's Answers to Defendant Ryder Truck Rental, Inc.'s First set of Interrogatories
- Defendant Mickey Truck Bodies, Inc's Responses to Plaintiff's Request for Production of Documents
- Defendant Mickey Truck Bodies, Inc's Answers to Plaintiff's Interrogatories
- Several color copied photographs of the accident scene
- Ryder's Collision/Incident Report dated 3/6/09
- State of Maryland Motor Vehicle Accident Report #0901524 dated 3/6/09
- Ryder Truck Lease and Service Agreement dated 12/21/09
- Numerous Ryder Truck Inspection Worksheets for the subject truck trailer #462852
- Ryder Truck Lease and Service Agreement dated 9/15/05 with accompanying documentation
- Mickey Beverage Parts and Options Manual
- Mickey Truck Bodies, Inc. Load Bear Series Operation and Service Manual

- CD Disk containing multiple color photographs.

In addition, a number of texts and documents have been researched and used as guidance for the analysis and preparation of this report including but not limited to:

- Dictionary of Terms Used in the Safety Profession. American Society of Safety Engineers, Des Plaines, IL, 1988
- ANSI Z535.4 - 2011 Revision of ANSI Z535.4 - 2007, American National Standards Association, Product Safety Signs and Labels
- Woodson, Human Factors Design Handbook. McGraw Hill, NY, 1981
- Accident Prevention Manual for Industrial Operations, Twelfth Edition. National Safety Council, Chicago, IL, 2001.

III. DISCUSSION

3.1 BACKGROUND

According to the documents provided to SPA, inc., on March 6, 2009, Mr. Heckman, a truck delivery driver for Wantz Distributors, Inc., and his assistant, Jeremy McAfee, were delivering beer to the Sandy Hook Grocery Store at 18952 Sandy Hook Road in Knoxville, Maryland. To make the delivery, Mr. Heckman was required to park the delivery vehicle on the side of Sandy Hook Road.

In the process of attempting to open a rolling door on the side of the subject delivery truck trailer Mr. Heckman was injured when the synthetic strap he was using to pull open the rolling door broke, causing him to fall into the roadway where he was struck by a Ford utility vehicle. This synthetic strap was attached to the inside of the rolling door. The strap's condition at the point of attachment was invisible to the driver.

Based on additional information outlined in **SECTION II** above,

Relevant Sections of Mr. McAfee's Deposition

Sections of Mr. McAfee's deposition relevant to SPA, inc.'s analysis include, but are not limited to the following:

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21-22 The only way to park the delivery truck to deliver the product was to drive past the store on the right, make a u-turn and then park on the side of the road next to the store facing the on-coming traffic.

- 26-27 There became an issue with the front bay on the passenger side of the truck due to beer up against the door. This was not a everyday occurrence but it does happen.
- 30-33 He was located on the ground. The door was opened approximately 6 – 7 inches which was enough for Mr. Heckman to grab the strap coming from inside of the truck in order to gain more leverage to open the rolling door. Mr. Heckman was standing on the inside of the wheel well. He was standing to the right of Mr. Heckman with his arms up underneath the door trying to get all the beer shoved back that needs to be shoved back. Mr. Heckman was pulling on the strap, the strap broke causing Mr. Heckman to fall backwards where he was struck by a Ford Excursion.

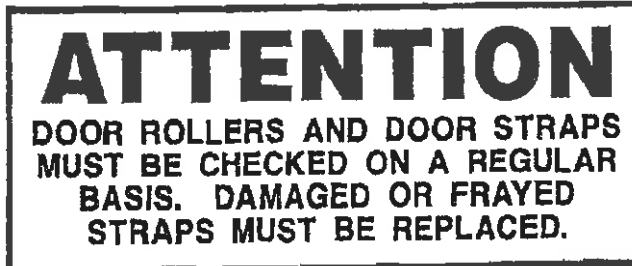
Relevant Sections of Mr. H. Dean Sink's Deposition

Sections of Mr. Sink's deposition relevant to SPA, inc.'s analysis include, but are not limited to the following:

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- 11 Mr. Sink is currently the president and CEO of Mickey Truck Bodies.
- 22 Mr. Sink feels that he has experience with issues relating to straps and warnings as they relate to the trucks since he has been working with Mickey since 1976. He said they have warning stickers they use and there are other warning stickers that the vendors put on some of the equipment.
- 36-37 Mickey Truck Bodies does not actually make the strap used on their trucks. They buy them from a company in Greensboro, North Carolina. That company is an interim supplier. They are called Southern Rubber, Greensboro. Mr. Sink does not know who actually manufactures the straps.
- 38 Mickey doesn't have any type of quality control that they use on the straps before installing them on their trucks other than to make sure they are new and that they look good. They check every strap before it is delivered to the customer that is operating it.
- 122 The "Attention" decal shown in Mickey 00073 was introduced in June 1995. Mr. Sink thinks that was around the same time that he had the discussion with the insurance company about it.
- 136-137 Between talking to their insurance company and noticing more warning stickers on products they got from suppliers, like the liftgates, Mr. Sink felt that it would be a good idea to develop their own warning stickers. Mr. Sink had not seen a sticker similar to "Attention" sticker on another company's beverage trucks or any other truck that uses a strap. He did not know who came up with the language that was used in the "Attention" sticker but he thinks it was someone at Mickey.

- 144-145 When the "effective immediately directive" came out on June 6, 1995 with the "Attention" decal, it said: "Damaged or frayed straps must be replaced." This was a concern because they didn't want their customers using frayed or damaged straps because it was a safety hazard. If it was frayed or damaged it would not be able to hold up to the rigors the job required. When Mickey sells the trucks they contain brand new materials that are in excellent shape so they want it to be kept that way.



Location: Above locking handle

*(*Mickey Beverage Parts and Options Manual)*

- 166-167 Mr. Sink did not know what ANSI was so he did not know if they had any regulations or standards on strap issues. Mr. Sink did not know of any governmental or trade organization that sets either regulations or standards for warnings on a beverage truck body.
- 181-182 Mr. Sink said he is not aware of Mickey ever having an outside consulting firm conduct a service for any Mickey product with respect to consumer or public use of its product as opposed to time studies for inside the plant. The same was true of warnings. Mr. Sink said that Mickey does have warnings inside their plant for their employees. For those warnings, Mickey's insurance company would come in and give suggestions on safety issues.
- 362-363 Mr. Sink did not know the measurements of the beverage truck. There is only one size for the Attention label though. The instruction manual says "above locking handle." This does not indicate that the sticker should be placed above the locking handle according to Mr. Sink. He didn't know who wrote that. He said the sticker is placed on the driver's side location. Sometimes the driver doesn't have a helper and is the only one unloading the truck so the sticker is on the driver's side since he had to go to that handle to start unloading.
- 363-365 Mr. Sink didn't know why they didn't put an Attention sticker on the other side of the truck as well. He didn't know who made the decision as to the number of Attention stickers that would be put on the truck. No one was consulted on the number of stickers they should use.

Relevant Sections of Mr. Stephen Faith's Deposition

Sections of Mr. Faith's deposition relevant to SPA, inc.'s analysis include, but are not limited to the following:

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|-------|--|
| 8-10 | Mr. Faith is a service manager for Ryder Truck Rental. He has held that position since December 2007. |
| 31-32 | Mr. Faith understood that once the trucks were leased to Wantz, Ryder Truck would provide services for preventative maintenance on those trucks. Preventative maintenance would be like a person taking their car in for service every few thousand miles so it won't break down. Mr. Faith thinks the preventative maintenance for the trailers that Wantz had leased was supposed to take place every 180 days. Wantz transports the trucks to Ryder so the PM work can be done. |
| 38 | Looking at a report for the vehicle involved in this case, unit number 462852, the customer name listed is Wantz. |
| 45-47 | Mr. Faith said that part of the inspection involves lubricating the doors on the trailers, including the rollers so they have to open the trailer doors to do that. When they lubricate the doors, they would look at everything including the straps and the track on the door. There is an item on the checklist that says "Any component that moves must be lubricated." It is under the section for "lubrication of system, lubrication, single point lubrication system." He said that when they would do the lubrication they would also check the straps. |
| 47-48 | Mr. Faith would agree that there is nothing specifically listed on the inspection forms about inspecting the straps attached to the doors. He said there was another form that does specifically mention checking the straps but he didn't remember which revision that is listed on. He is not aware of any inspection reports before March 6, 2009 that specifically said to check the straps. |
| 48-50 | Looking through the inspection reports in the file for truck #462852, Mr. Faith said he did not see any forms that mention checking the pull straps before 2009 but he said he may have overlooked it. After March 2009 there is an inspection report that mentions checking the pull straps which was done on June 13, 2011. Mr. Faith did not know why that report had a category for checking the pull strap when the prior reports did not. |

54-55 The reports in the file for the trailer involved in this case do not contain any follow up reports that mention repairing pull straps.

79-80 Mr. Faith said that some of the Wantz drivers have complained about frayed straps before. When that happens the straps are replaced. When they are replaced it is put on an "RO." The driver must fill out a DVCR and then Ryder will put it on. There is a notation that a strap was replaced on March 27, 2012. Before 2009 Mr. Faith did not see any mention of any repairs for a frayed strap. They don't try to repair the straps, they just replace them.

3.2 ANALYSIS

3.2.1 Applied Safety and Human Factors Research.

Hazards relating to opening rolling doors with a strap can occur and methods used to mitigate or reduce this type of accident, as quoted by the National Safety Council and others and in their orders of effectiveness are:

- Eliminate the hazard from the machine, method, material, or structure.
- Control the hazard by enclosing or guarding it at its source (This includes the warning of those individuals exposed to a recognized hazard).
- Train personnel to be aware of the hazard and to follow safe job procedures to avoid it.
- Provide personal protective equipment.

3.2.2 Safety

Safety research related to occupational accident prevention attempts to identify hazards in the environment which can, under certain circumstances, lead to accidents. Accidents are considered to be "unplanned events." Once a hazard or type of hazard is identified through recognized hazard identification techniques such as job safety analysis, system safety analysis, subsystem safety analysis, failure modes and effect analysis, etc., then accident prevention techniques can be applied to eliminate the hazard or reduce the possibility of a recognized hazard causing an accident. Recognized methods of accident prevention are commonly addressed in safety standards and literature.

3.2.2 Hazards

Hazards are defined as a potential condition or set of conditions, either internal and/or external to a system, product, facility, or operation, which, when activated by a stimulus, transforms the hazard into a real condition, or series of events, culminating in a loss or an accident. A simpler and more fundamental definition of a hazard is the potential to do harm.

3.2.3 Safety Standards

Safety standards, rules, and regulations consist of recognized methods utilized to reduce the probability of an unplanned event (accident). To begin with, even if company standards are not

established, the OSHA Act and OSHA standards outline basic responsibilities for companies, supervisors, and workers. In addition, consensus safety standards established by the National Safety Council (NSC), American National Standards Institute (ANSI), American Society for Testing and Materials (ASTM), Building Officials and Code Administration (BOCA), and others have outlined principles of safety.

- **ANSI Z535.4 Product Safety Signs and Labels:**

- 4. Definitions**

- 4.4 Hazard:** A potential source of harm.

- 4.12.3.2 Safety Notice Sign:** Sign that gives notice of safety practices not directly related to physical injury.

- 4.12.3.3 Safety Instruction Sign:** Sign that identifies specific safety-related instructions or procedures. This type of sign may be used to supplement a hazard alerting sign by providing a place to convey lengthy safety-related instructional information.

- 4.14 Signal Words:** The words used in the signal word panel. The signal words for hazard alerting signs are "DANGER," "WARNING," and "CAUTION". Safety notice signs use the signal word "NOTICE." Safety instruction signs use words that are specific to the situation.

- 4.14.3 Caution:** Indicates a hazardous situation that, if not avoided, could result in a minor or moderate injury.

- 3.2.4 Human Factors Engineering/Ergonomics**

- Human factors engineering/ergonomics is a science which combines engineering and psychology to design and/or provide people with safe and efficient living and working conditions. Knowledge of human psychological and physiological capabilities and the use of scientific methodology provide details necessary to evaluate products, systems, and the user's ability to perceive and interact with the existing environment. In addition, human factors engineering is a science involved with the study of human characteristics in applied settings, which combines the disciplines of anthropometry, physiology, psychology, and engineering to design and/or provide people with safe and efficient living and working conditions.

- 3.2.5 Product Warnings**

- The design of product warning signs has evolved over decades of research, analysis, and standardization. As early as the 1980's, standard product warning signs have the following elements:

- **Sign Classification** - Hazard classification, Signal word selection, Multiple hazard identification, One sign or label, Levels of seriousness
- **Sign or label format** - Panels, Panel arrangement, Safety alert symbol, Border, Word message, Pictorial
- **Safety sign and label colors** - Standard colors, Signal word panels, DANGER, WARNING, CAUTION, Safety alert symbol, Message panel, Symbol/pictorial panel, Border, Color options, Message and symbol/pictorial panels
- **Letter style and size**
- **Sign and label placement** - Location, Protection
- **Expected life and maintenance** - Expected life, Product user Instructions, Maintenance, Replacement
- **Symbols/pictorials.**

3.2.6 Human Factors Engineering Analysis

In the subject accident Mr. Heckman, the task of attempting to open a rolling door on the side of a trailer designed for beverage delivery, and the environment are all involved in the process of Mr. Heckman pulling on the subject strap. Therefore, each of them may be treated as individual units (subsystems) within a broader framework of a safety/human system consisting of the individual, the task, and the environment.

The combination of or interface between these three components operates within an environment to perform a specific task using prescribed or recognized methods and the components of the above mentioned system are all interrelated, and failure of any one part can affect the other parts.

The individual, Mr. Heckman, performing this task may extend his margin of safety in two ways. The first is by misperceiving danger in the environment (i.e. perceptual failures); the second is by reacting inappropriately to perceived danger (i.e., behavioral failures). In short, an individual may suffer harm from a failure to perceive or a failure to act.

Perceptual and behavioral failures are often due to the absence of the environmental characteristics or cues or flags which indicate danger, such as in a dark surrounding. Perception may fail even when environmental characteristics are present and reliable. This may occur because of:

- defects in the sensory apparatus
- immaturity of the sensory apparatus
- temporary incapacity from drugs or illness
- untrained discrimination; or
- inattention

Behavior may likewise fail even though the environment provides cues to satisfy performance. This may occur because of defective, inadequately trained, or temporary incapacities of behavior.

There were no nationally recognized warning signs located on the exterior of the door Mr. Heckman was attempting to open, warning of the use of damaged straps to open the side rolling door; and the attachment of the strap to the door was located on the inside of the rolling door and therefore hidden from Mr. Heckman.

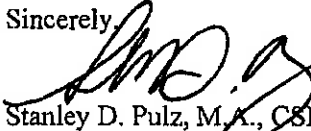
Analysis of the environmental, individual, and physical factors above indicate that there were no visual cues available to Mr. Heckman, alerting him to the faulty condition of the subject strap related to his work activities.

IV. SIGNATURES

SPA, inc. hereby certifies the expressed opinions and conclusions have been formulated within a reasonable degree of professional certainty. They are based upon all of the information known by SPA, inc. as of the time this report was issued, as well as knowledge, skill, experience, training, and/or education.

If additional information or materials become available, SPA, inc. reserves the right to amend or supplement this report.

Sincerely,


Stanley D. Pulz, M.A., CSP, P.E.
President